



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,797	06/11/2001	Toshiaki Ito	13452-011001 / PH-709US	3747

7590 06/26/2003

MI K. KIM  
Fish & Richardson P.C.  
Suite 500  
4350 La Jolla Village Drive  
San Diego, CA 92122

EXAMINER

FORMAN, BETTY J

ART UNIT

PAPER NUMBER

1634

DATE MAILED: 06/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/879,797

**Applicant(s)**

ITOH ET AL.

**Examiner**

BJ Forman

**Art Unit**

1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-6 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-6 and 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 March 2003 has been entered.

2. This action is in response to papers filed 25 March 2003 in which claims 4-6 and 8-10 were amended, claims 1, 3 and 7 were canceled; claims 11-13 were added and ¶ 33 of the specification was amended. All of the amendments have been thoroughly reviewed and entered. The previous objections and rejections in the Office Action dated 28 October 2002 are withdrawn in view of the amendments.

All of the arguments have been thoroughly reviewed but are deemed moot in view of the amendments, withdrawn rejections and new grounds for rejection. New grounds for rejection are discussed.

Claims 4-6 and 8-13 are under prosecution.

***Priority***

*Reiterated from previous office action*

3. Applicant's claim for domestic priority under 35 U.S.C. 120 is acknowledged. However, the Parent Application 09/451,666 filed 30 November 1999 upon which priority is claimed does not provide adequate support under 35 U.S.C. 112 for claim 6 of this application because the '666 application does not teach a v-shaped notch. Therefore, the effective filing date for instant claim 6 is the filing date of the instant application i.e. 11 June 2001.

4. The parent application also does not provide adequate support for new claim 10 drawn to two V-shaped notches crossing each other. Therefore, the effective filing date for instant claims 6 and 10 is the filing date of the instant application i.e. 11 June 2001.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 1634

6. Claims 4 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Goldenberg et al (U.S. Patent No. 6,347,259, filed 1 April 1999).

Regarding Claim 4, Goldenberg et al disclose a spotting pin comprising a solid member having at least one recess formed only at the head end thereof wherein the recess comprises at least one groove (Column 5, line 61-Column 6, line 5 and Fig. 8).

The recitations "to spot a solution containing at least one reagent on a plate" and "to carry the reagent within the recess to the plate" are recitations of the intended use for the pin. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). The structural limitations of the instant claim include a solid member having a least one recess at the head end wherein the recess comprises at least one groove. Goldenberg et al disclose the structural limitations of the instant claim. Therefore the functional use recited in the claim does not differentiate the claimed apparatus from that of Goldenberg et al.

Regarding Claim 12, Goldenberg et al disclose the pin wherein the recess is concave ((Column 5, line 61-Column 6, line 5 and Fig. 8).

7. Claims 4 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Martinsky et al (U.S. Patent No. 6,101,946, filed 13 November 1998).

Regarding Claim 4, Martinsky et al disclose a spotting pin comprising a solid member having at least one recess formed only at the head end thereof wherein the recess comprises at least one groove (Column 6, lines 21--75 and Fig. 3B).

Art Unit: 1634

The structural limitations of the instant claim include a solid member having a least one recess at the head end wherein the recess comprises at least one groove. Martinsky et al disclose the structural limitations of the instant claim. Therefore the functional use recited in the claim does not differentiate the claimed apparatus from that of Martinsky et al.

Regarding Claim 12, Martinsky et al disclose the pin wherein the recess is concave (Fig. 3B).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-6, and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lough et al (WO 98/20019, published 14 May 1998).

Regarding Claims 4-6 and 8-13, Lough et al teach a spotting pin comprising a solid member wherein the solid member has at least one recess at a tip thereof (page 19, lines 11-12 and 15-17 and Fig. 9a, 9b, and 9c) and they teach the tip comprises "any number of configurations" (page 19, lines 15-16) but they do not specifically teach the recess comprises at least one groove (Claim 4); a cross-shaped groove (Claim 5); at least one V-shaped notch (Claim

Art Unit: 1634

6); a cross-shaped groove (Claim 8); a flat tip with a cross-shaped groove (Claim 9 and 11); and two V-shaped notches crossing each other (Claim 10 and 13).

The courts have stated that absent evidence to the contrary; a particular configuration of a known device is a matter of choice which would have been obvious to one skilled in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the tip configuration of Lough et al based on their teaching wherein the pin can be of "any number of configurations" (page 19, lines 15-16) for the obvious benefits of optimizing pin configuration for desired spotting results as suggested by Lough (page 22, lines 10-17).

10. Claims 4-6, and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little et al (U.S. Patent No. 6,347,259, filed 1 April 1999).

Regarding Claims 4-6 and 8-13, Little et al teach a spotting pin comprising a solid member wherein the solid member has at least one recess at a tip thereof (Column 50, lines 39-50) and they teach the tip comprises "any number of configurations" (page 19, lines 15-16) but they do not specifically teach the recess comprises at least one groove (Claim 4); a cross-shaped groove (Claim 5); at least one V-shaped notch (Claim 6); a cross-shaped groove (Claim 8); a flat tip with a cross-shaped groove (Claim 9 and 11); and two V-shaped notches crossing each other (Claim 10 and 13).

The courts have stated that absent evidence to the contrary; a particular configuration of a known device is a matter of choice which would have been obvious to one skilled in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the tip

Art Unit: 1634

configuration of Little et al based on their teaching wherein the pin can be of "any number of configurations" (Column 50, lines 39-55) for the obvious benefits of optimizing pin configuration for desired spotting results as suggested by Little (Column 51, line 65-Column 52, line 3).

### **Response to Arguments**

11. Applicant's arguments regarding the previous rejections are deemed moot in view of the amendments, withdrawn rejections and new grounds for rejection. However, the arguments are addressed as they apply to the above rejections.

Applicant argues that Lough and Goldenberg do not teach or suggest a spotting pin being formed to carry the reagent within the recess to the plate but instead are holding pins to which are fixed probes or primers. The argument has been considered but is not found persuasive because as stated above, the courts have stated that a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). The structural limitations of the instant claim include a solid member having a least one recess at the head end wherein the recess comprises at least one groove. Lough et al and Goldenberg et al disclose the structural limitations of the instant claim. Therefore the functional use recited in the claim does not differentiate the claimed apparatus from that of Lough et al and Goldenberg et al.

Applicant further argues that Goldenberg et al do not specify the dispensed liquid to be bioprobes or reagents. The argument has been considered but as stated directly above, a claim drawn to an apparatus must distinguish the claimed apparatus over the prior art in terms of structure, not function.



Art Unit: 1634


**Conclusion**

12. No claim is allowed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (703) 306-5878. The examiner can normally be reached on 6:30 TO 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (703) 308-1119. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-8724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.



BJ Forman, Ph.D.  
Patent Examiner  
Art Unit: 1634  
June 23, 2003